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Record Of Decision

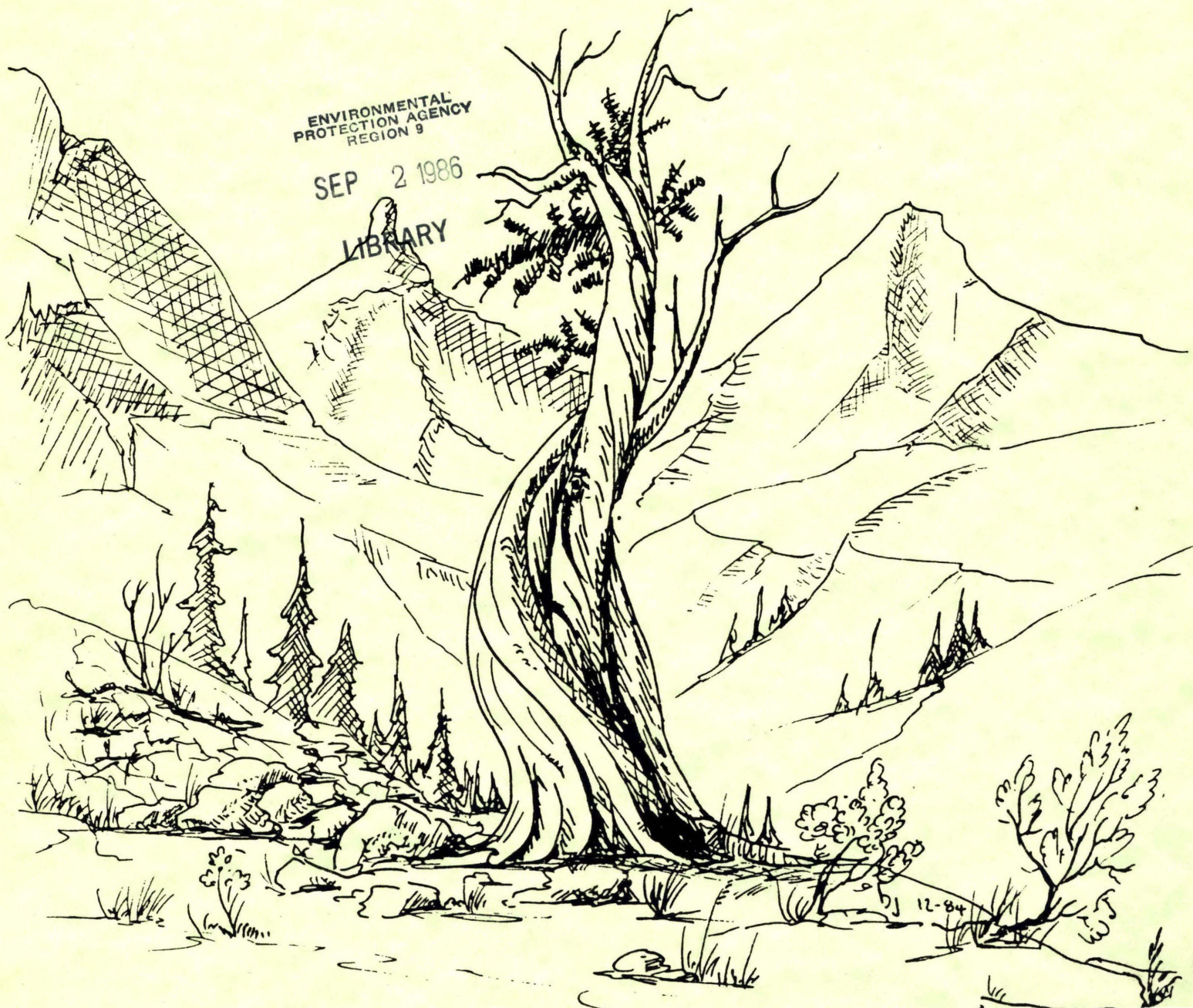
Final Environmental
Impact Statement
and

Land and Resource
Management Plan

Humboldt National Forest



United States
Department of
Agriculture



RECORD OF DECISION
FOR
USDA - FOREST SERVICE

FINAL ENVIRONMENTAL IMPACT STATEMENT

HUMBOLDT NATIONAL FOREST
LAND AND RESOURCE MANAGEMENT PLAN

Elko, Humboldt, Lincoln, Nye
and White Pine Counties, Nevada

HUMBOLDT NATIONAL FOREST
RECORD OF DECISION
FOREST PLAN

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I. INTRODUCTION

This Record of Decision documents approval of the Land and Resource Management Plan (the Plan) for the Humboldt National Forest (the Forest). The area covered by the Plan is located in the mountain forest and rangeland in northern and eastern Nevada and contains 2,527,929 acres of National Forest System (NFS) lands. The Plan provides a program for natural resource management activities and establishes management requirements to be employed in implementing it. The Plan identifies resource management practices, projected levels of production of goods, services, and management, and locations where various resource management activities are expected to occur.

The Plan provides for coordinated multiple use management of outdoor recreation, wilderness, range, woodland products, watershed, wildlife and fish, and minerals resulting in sustained yields of goods and services for the benefit of the American people. The Plan also provides broad direction for dealing with applications and permits for occupancy and use of National Forest lands by the public and for management of impacts from mineral activities on the Forest.

The Final Environmental Impact Statement (FEIS) describes proposed action (the Plan) and alternatives to the proposed action. It also describes the environment to be affected and discloses potential environmental consequences of implementing the proposed action and alternatives to the proposed action.

Alternatives presented in these documents contain specific management actions for the plan period. The plan period is the next 10 to 15 years only. (The plan period is defined by the NFMA regulations as one decade (36 CFR 219.3 (1982)), while the law permits a 15 year maximum (16 USC 1604 (f)(5))).

Management actions, outputs, and environmental and socio-economic effects for several decades beyond the plan period are also discussed for the alternatives in the FEIS, but not as part of the Plan. The purpose of these discussions is twofold: (1) To present a long-term analysis for decisionmakers and the public of the management necessary for each alternative to achieve and maintain, in perpetuity, a high level of regular periodic outputs of the various resources without impairment to land and resource productivity (16 USC 531). This analysis also provides an estimate of the level of long-term outputs for each alternative. (2) Program development for Resources Planning Act (RPA) requires information for four decades beyond the plan period (16 USC 1602). In order for the analysis of alternatives for an RPA program to link with actual conditions and local issues at the Forest level a complete estimate of outputs, costs, and effects for the RPA time horizon is necessary.

Projection of alternative attributes beyond the plan period, although required by law, does not commit the Forest to action beyond the plan period. The Forest is required to revise the plan within 15 years of its development and this revision may well establish different long-term goals with different future projections.

The FEIS and Plan were developed under implementing regulations of the National Environmental Policy Act (NEPA), Council on Environmental Quality, Title 40, Code of Federal Regulations, Parts 1500-1508 (40 CFR 1500-1508); and the National Forest Management Act (NFMA), Title 36, Code of Federal Regulations, Part 219 (36 CFR 219).

In promulgating Land and Resource Management Plans the Forest Service is trying to satisfy two somewhat different purposes:

1. Compliance with the statutory mandate of NFMA to develop and maintain a management system so that an "interdisciplinary approach to achieve integrated consideration of physical, biological, economic, and other sciences" will be applied to all future decisions, 16 U.S.C. 1604(b), 1604(f), 1604(g), and 1604(c).
2. Linkage with RPA Program and Assessment through current modeling techniques to make forecasts of outputs that could be produced under the Plan and alternatives to the Plan.

Forecasts of outputs that could be produced under the Plan and alternatives (FEIS, Chapter II) are useful in making comparisons among alternatives and the Plan. There is no assurance that outputs will actually occur at projected levels because of limitations of modeling and projections and because on-the-ground conditions, changes in laws and regulations, national and local economic conditions, and appropriated budget levels all will affect actual outputs. As with Management Direction, projected outputs can be adjusted through rescheduling of proposed

implementation schedules (which may require Plan amendment) or Plan revision.

Approval of the Plan marks a turning point from Plan promulgation to Plan implementation. This does not mean that all issues are decided. Public Involvement will continue with Plan implementation. Specific projects and activities will be examined in light of Plan direction with involvement of other Federal agencies, State agencies, interest groups, and the public, Plan implementation and administration can realize systematic integration of resources and uses.

The Plan provides the Forest Service, Forest users, and public with a framework within which to seek resolutions of future problems that may arise in management of the Humboldt National Forest. As shown by various points of view represented in Chapter VI of the FEIS, it is unlikely that the Forest Service can reconcile interests in a way satisfactory to everyone. In fulfilling its public trust duty in administration of the Plan for the people of the whole country, the Forest Service will be guided by basic principles of multiple use and sustained yield. A discussion of legislative authorities which apply to National Forest management is in the Preface of the Plan.

Major features of the Plan include:

Forest Condition

The Plan identifies desired future condition of the Forest: Goals are presented in Chapter IV of the Plan. Goals are timeless and form the principal basis for developing objectives (36 CFR 219.3).

Management Objectives

The Plan identifies management objectives necessary for the Forest to achieve its goals. It also describes how resources will be managed to attain these objectives. Objectives are presented in Chapter IV of the Plan. These objectives are displayed as annual levels of goods and services planned during the 10 to 15 year planning period. Achievement of these objectives is contingent upon many factors including the appropriated level of funding, national and local economic factors, and dynamic natural and physical factors at work in the Forest.

Management Requirements

The Plan specifies management requirements that control and govern how activities will be implemented on the Forest. The Plan includes Forest-Wide Standards and Guidelines and Management Area Prescriptions and Direction (Chapter IV). Forest-Wide Standards and Guidelines detail overall management requirements that apply to the entire Forest during Plan implementation. They are applied in addition to

management requirements for each Management Area Prescription and Direction. The Plan assigns Management Area Prescriptions to specific land areas within the Forest. Mitigation measures to avoid or minimize environmental harm are incorporated as part of management requirements in Forest Direction and Management Area Prescriptions in Chapter IV of the Plan. Mitigation is also discussed in Chapter IV of the final EIS. The Plan Map displays locations where various Management Area Prescriptions apply.

Amendment or Revision

The Plan establishes management direction for the next 10 to 15 years, when it will be revised. Short-term opportunities, problems, or conflicts may arise in managing the Forest that were not anticipated in the Plan. The Plan provides a framework for responding to unanticipated needs and can be adjusted, if needed, through rescheduling or amendment.

II. DECISION

[The Land and Resource Management Plan] (referred to as Alternative K in the Final Environmental Impact Statement) is hereby approved for management of the Humboldt National Forest.]

This decision is based upon a review of environmental consequences of alternatives disclosed in the final EIS. [Particular attention was given to responsiveness of alternatives to public issues and management concerns identified through developmental phases of the Forest Plan, and more recently restated through public comment on the draft EIS and proposed Forest Plan.] Public comments and Forest Service responses are included in Chapter VI of the FEIS and discussed in relation to planning questions in the FEIS, Chapter I.

The Forest Plan is a strategy for managing the Forest. Decisions were made in light of social needs and knowledge of potential impacts. The Plan does not identify various administrative activities needed to carry on day-to-day internal operations. For example, the Plan does not address personnel matters, fleet equipment provisions, or internal organization changes. It is a plan for managing the Humboldt National Forest in an environmentally sound manner to produce goods, services, and amenities in a way that maximizes long-term public benefits.

Once implemented, the Plan replaces or supersedes all previous resource management plans prepared for the Forest, subject to existing rights, contracts, and specific authorities. Non-complying uses, permits, and contracts will be brought into compliance in accordance with the Plan.

Major aspects of this decision are:

- Vegetation treatment will be used to achieve goals and objectives for vegetation management. Vegetation treatment is an important tool in multiple use management of the Forest. Approximately 2,350 acres of vegetation will be treated each year. Treatments will include range forage improvement projects (2,000 acres/year), wildlife habitat improvement projects (300 acres/year), timber stand improvement projects (13-62 acres/year), and soil and water improvement projects (17 acres/year).
- Existing developed recreation sites will be maintained to standard. All sites will be operated at the standard level.
- Emphasis on dispersed recreation management, provision for dispersed recreation opportunities, and trail system operation and maintenance will increase. In response to public comment on the proposed Plan, about 5 miles of trail construction/reconstruction will be completed annually.
- Permitted livestock grazing will decrease by about 1,400 animal unit months during the first 10 years. Emphasis will be toward bringing 11 percent unsatisfactory condition range-lands (55,000 acres) to satisfactory condition by 2035.
- Greater emphasis will be placed upon maintenance and improvement of wildlife habitat at a rate of approximately 275-900 acres per year. Critical spring-fall and winter range carrying capacity will be increased. Structural wildlife habitat improvement projects and nonstructural wildlife habitat improvement acres will nearly triple from current levels.
- Nonwilderness areas will be generally available for mineral entry and leasing. Each application will be considered on a site-specific basis.
- Wilderness lands were withdrawn from mineral leasing and location on January 1, 1984, except for valid existing rights. New applications for mineral leasing or location within wilderness areas will not be accepted.
- Recommendations for wilderness are preliminary and administrative in nature. They will receive further review and possible modification by the Chief of the Forest Service, the Secretary of Agriculture, Congress, and the President of the United States. Final decisions on wilderness designation have been reserved by Congress.
- The following areas are recommended for wilderness classification:

<u>AREA</u>	<u>ACRES</u>
Mount Moriah	60,700
Bristlecone (Wheeler Peak)	51,700
Ruby Mountains	55,600
Grant Range	43,100
Jarbridge Addition	26,400
East Humboldt	18,500
Soldier Lakes	<u>12,300</u>
TOTAL	268,300

--Consideration of wilderness designation by Congress for the Grant Range should be delayed until mineral surveys have been completed within the area.

--Five areas will be nominated as Research Natural Areas. Natural condition of these areas will be protected.

--The Forest Service will assure that water needs for multiple use management are met.

Emphasis of the Plan is not on site-specific decisions or specific resource outputs. Rather, it is on application of various management practices, provisions, and intensities to areas of land to achieve multiple-use goals and objectives with optimum economic efficiency. However, if changing needs and opportunities, Congressional land designations, catastrophic events, or major new management or production technologies occur, the Plan may be amended or revised. If such changes significantly affect the Plan, it must be revised by the same procedure used in development and approval of the original Plan. If such changes do not significantly affect the Plan, the Forest Supervisor may amend it by a less extensive procedure which includes public notification and compliance with National Environmental Policy Act (NEPA).

Outputs shown in the Plan are expectations, projections, or targets. For example, acre-feet of water meeting water quality goals is a target number the Forest will strive to attain. Another example is permitted animal use months (AUM's) of grazing.

Activities, many of which are interdependent, may be affected by funding levels provided by Congress. The Plan will be implemented by way of various site-specific projects, such as building a road, developing a campground, or sale of woodland products. If funding is changed in any given year, projects scheduled for that year may have to be altered or rescheduled. However, goals, management priorities, and land-activity assignments described in the Plan will not change unless the Plan is revised or amended. If funding changes significantly over a period of several years in a way that would alter basic management objectives, the Plan itself may have to be amended (36 CFR 219.10(e.)). NOTE: significance will be determined in the context of particular circumstances.

As a management strategy for the Forest, the Plan and accompanying FEIS are programmatic in nature. Emphasis of the Plan is not on site-specific decisions. Rather, the Plan provides overall systematic guidance and establishes management direction to govern future actions.

During implementation, when various projects are designed, more site-specific analyses may be required. These analyses may result in Environmental Assessments (40 CFR 1508.9), Environmental Impact Statements (40 CFR 1508.11) or categorical exclusions (40 CFR 1508.4) and, possibly, if of major consequences, an amendment or revision of the Plan (36 CFR 219.10(f) and (g)). Any resulting documents will be tiered to the FIES, pursuant to 40 CFR 1508.28.

III. ALTERNATIVES CONSIDERED

Nine alternatives were developed and analyzed in detail in the FEIS in response to requirements of NEPA, NFMA, public input, and roadless area analysis. They are briefly summarized as follows:

Alternative A - Significant Wilderness/Commodity Emphasis

This alternative reflects production of outputs that would occur if a significant amount of roadless areas on the Forest were designated as wilderness. Approximately 49 percent of the Forest would be designated for wilderness. Wilderness and dispersed recreation opportunities would increase significantly. Most other resource outputs would increase slightly. Acres leased for minerals activities would decrease significantly.

Alternative C - Present Net Value

This alternative emphasizes production of a mix of market and non-market goods that would provide greatest net dollar returns. Approximately 28 percent of the Forest would be recommended for wilderness. Most resource outputs would increase slightly. Acres leased for minerals activities and output of woodland products would decrease slightly.

Alternative D - Current Budget

This alternative depicts the level of goods and services that would be produced if the budget remained at current levels. Wilderness and dispersed recreation opportunities would increase moderately. Other resource outputs would decrease slightly to moderately. Approximately 13 percent of the Forest would be recommended for wilderness.

Alternative E - Constrained Budget

This alternative provides for custodial management only. The budget would be 25 percent below the previous 10-year average. Most outputs would decline because of deteriorating facilities, less services would be provided, and minimum resource management would occur. No areas would be designated for wilderness outside the existing Jarbidge Wilderness.

Alternative F- 1980 RPA Program

This alternative directs management efforts toward achieving 1980 RPA targets assigned to the Humboldt National Forest by the Intermountain Regional Guide. All outputs would increase, and approximately 8 percent of the Forest would be recommended for wilderness.

Alternative H - Current Management, No Action

This alternative depicts production of goods and services when current management practices are continued into the future. It would produce a mix of resource outputs at current levels. Approximately 19 percent of the Forest would be recommended for wilderness.

Alternative I - Market Opportunities Emphasizes

This alternative emphasizes production of woodland products, livestock, minerals, and developed recreation resources that would provide income to the Government. It would provide the largest number of acres leased for minerals activities. Most outputs would increase slightly, but wilderness and wildlife and fish use would decrease. No areas outside the existing Jarbidge Wilderness would be recommended for wilderness.

Alternative J - Non-Market Opportunities Emphasis

This alternative emphasizes production of nonrevenue producing resources such as wilderness, wildlife and fish, water, and dispersed recreation. The largest number of acres of the Forest, approximately 71 percent, would be recommended for wilderness. The fewest number of acres would be available for minerals leasing. Developed recreation, livestock, and woodland products outputs would decrease slightly. Other resource outputs would increase slightly.

Alternative K - Proposed Action, Forest Plan

This alternative emphasizes a desirable mix of market and non-market resource outputs while providing for protection to the environment. It was modified in response to public comment on the DEIS to (1) increase the number of areas recommended for wilderness, (2) reduce resource use conflicts between recommended wilderness and heli-skiing, mining activities and grazing use, and (3) increase management emphasis for wildlife and recreation opportunities. Consequently, the number of areas recommended for wilderness designation was increased from 5 to 7, approximately 11 percent of the Forest area. Several proposed wilderness areas were reduced in size to eliminate non-conforming uses. Wildlife, livestock, recreation, and minerals outputs increase moderately, and other resource outputs remain essentially the same.

Alternatives B and G were considered in the planning process, but were eliminated from detailed study. Alternative B was eliminated because it produced only minor differences in resource yields from other alternatives. Alternative G was eliminated because it produced essentially the same resource outputs as Alternative F.

IV. RATIONALE FOR SELECTED ALTERNATIVE

A. Issues, Concerns, and Opportunities

Early in the planning process public issues, concerns, and opportunities (ICOs) were identified. These ICOs, collectively referred to as issues, were the driving force behind much of the planning process. To facilitate planning, each issue was written as a planning question to be resolved during the process. For some issues, primary issue areas were also identified for clarity. Chapter I of the FEIS lists primary issue areas. Chapter III of the Plan describes how the Plan responds to each issue. Planning issues are listed below.

Issue #1 - Wilderness

How should the Humboldt National Forest resolve the wilderness/nonwilderness question for all roadless areas on the Forest?

Issue #2 - Wildlife Habitat

How should wildlife and fish habitat be managed on the Forest?

Issue #3 - Minerals Management

How should the Forest manage its mineral resources?

Issue #4 - Range

How should the Humboldt National Forest manage its grazing resources?

Issue #5 - Off-Road Vehicles

To what extent should National Forest System lands be closed to off-road vehicles to prevent resource damage?

Issue #6 - Water

How should the Forest manage its watersheds to protect the water resource?

Issue #7 - Public Access

How and where should the Humboldt National Forest provide public access to National Forest System land?

Issue #8 - Special Interest Areas

How should the Forest manage areas of special interest, such as bristlecone pine stands and cultural resource sites?

Issue #9 - Riparian Zones

How should the Forest's riparian areas be managed and what protective measures should be implemented?

Two new issues emerged from public review and comment of the DEIS and draft Plan. These refer to protection of bristlecone pine stands and increased emphasis on recreation management.

Alternatives for managing the Humboldt National Forest were formulated by the Management Team. During this process, issue topics and statements were examined so that alternatives would be developed that were responsive to issues and concerns.

Decision criteria directly linked to public issues were developed early in the planning process and used to formulate, compare, and evaluate alternatives. Resource-related issues and primary issue areas were examined and criteria were established for each. Resource-related issues and issue areas are those that directly affect future use of the land.

Administrative issues which do not affect use of land are resolved through administrative actions and are constant for all alternatives. Therefore, these were not used in identifying a preferred alternative, and decision criteria were not developed for them.

Decision criteria are desirable attributes of an alternative in resolving public issues. Thus, alternatives that ranked high when evaluated against the criteria were favored.

Measurable factors with units of measure were outlined for each criterion wherever possible. Differences for each factor were evaluated for various alternatives. These differences provide the basis on which alternatives were assessed. If differences for some resources were not very great between alternatives (as is the case with soil and water), the factor received low value and little consideration when choosing between alternatives.

Alternative K was identified as the management approach that best met these criteria and provided maximum net public benefits. It was selected as the preferred alternative (the Plan).

B. Areas of Significant Public Interest

Following public review of the DEIS, draft Forest Plan, and Appendices, the Forest received 212 comments. Areas of significant public interest expressed in these comments are described below.

1. Wilderness

The large majority (approximately 94 percent) of public concern focused on the wilderness issue. Most comments expressed a desire for the Forest Plan to recommend additional roadless areas and/or additional acreage for wilderness. After reviewing comments and reanalyzing roadless area information and supporting data, two additional areas are being recommended for wilderness classification in the Final Plan. These are the East Humboldt and Soldier Lakes Recommended Wilderness Areas, containing 18,500 acres and 12,300 acres respectively.

Roadless areas not recommended for wilderness designation in the Final Plan will be managed for nonwilderness uses. Areas featuring Primitive (P) and Semi-Primitive Non-Motorized (SPNM) recreation will remain essentially undeveloped except for minerals production. The remaining areas will be managed for Semi-Primitive Motorized (SPM) recreation. It is estimated that 688,300 acres will be available for wilderness evaluation when the Plan is revised. The category "Roadless" will no longer exist with publication of the Final Plan.

Another area of significant public interest relative to the wilderness issue centered around requests for boundary adjustments of areas recommended for wilderness. In response to these comments, boundary adjustments were made on four of the five original areas recommended for wilderness. In the Mount Moriah, Bristlecone, and Ruby Mountain recommended Wildernesses, boundaries were adjusted to exclude areas of potential resource conflicts. These adjustments resulted in a reduction of acreage for these areas of 21,043, 8,461, and 11,493 acres respectively. The boundary of Jarbidge Addition was modified to include additional acreage of quality wilderness. This modification resulted in an increase of 2,960 acres recommended for wilderness. The boundary of the recommended Grant Wilderness was not changed.

A substantial number of comments (about 21 percent) stated that construction and reconstruction of roads in or near roadless areas should be prohibited. Roads are constructed by mining companies as specified in their mining operating plans. The Forest's role is to evaluate road design and location and other forms of reasonable access.

2. Wildlife

Numerous public comments (approximately 31 percent) expressed concern that wildlife and wildlife habitat conditions were not receiving adequate emphasis in the DEIS and Draft Plan. A significant number of comments were submitted by the Nevada Department of Wildlife (NDOW). Their major concerns were related to riparian area management and a desire for increased emphasis on wildlife management programs.

In response to these comments, management emphasis was increased for wildlife management. Additional management direction and standards and guidelines were incorporated into the Final Plan to benefit wildlife. Moreover, existing standards and guidelines were strengthened in the Final Plan, where appropriate, to provide for increased management emphasis. The Plan now provides for a substantial increase in number of structural and nonstructural wildlife habitat improvement projects.

3. Riparian Areas

Most public comments regarding wildlife also described a concern about the Forest's lack of a more ambitious riparian area management effort. Commenters urged the Forest Service to modify the plan to provide improved management of these important areas.

As a result of public concern, management direction and standards and guidelines were strengthened to support a more intensive riparian area management program. Also, new standards and guidelines were added to the Plan to ensure increased emphasis for the program. A number of the wildlife structural and nonstructural habitat improvement projects are planned within appropriate riparian areas.

4. Bristlecone Pine

Approximately 24 percent of comments received expressed concern for safeguarding ancient bristlecone pine stands. Commenters urged the Forest Service to support protection of these trees.

A specific management goal was added to the Plan to emphasize protection. Standards and guidelines were also strengthened to provide for improved protection practices.

5. Minerals

Comments about minerals management focused on impacts of mineral exploration in areas recommended for wilderness, and impacts of mineral exploration on wilderness quality of areas not recommended. The mining industry also contended that mineral resource development did not receive equal consideration with other resource management activities.

Management direction and Forest-wide standards and guidelines for locatable, leasable, and salable minerals management were developed based on the 1872 Mining Law as amended, general mining laws, NEPA, and other statutory and regulatory direction. Outside of wilderness, National Forest System lands are generally available for mineral exploration and development unless withdrawn. Minerals management received equal consideration with other resources, including wilderness, through analysis of mineral potential, active and

historic mining (see 36 CFR 219.22, Mineral Resources). This data has been incorporated into both Forest Plan and FEIS.

The Federal Land Policy and Management Act of 1976 (Section 204) provides for mineral withdrawal reviews on all Federal lands. The review schedule in Chapter III of the FEIS conforms to the mandate of this Act. Although there is no method for anticipating when or where minerals activities will occur on the Forest, likelihood of mineral development is discussed in Chapter III of the FEIS. Chapter IV discloses mineral potential of roadless areas and describes potential consequences of minerals activities. Since there is no means to identify applicable stipulations prior to lease applications, lease stipulations, and criteria will be applied when an application is submitted.

Appropriate reclamation standards and guidelines have been added to the Plan to provide for reclamation of lands disturbed by mining activities.

6. Recreation

Recreationists expressed a desire to see an expanded recreation program. They criticized the Forest's program of merely maintaining existing facilities and indicated a preference for increased management emphasis to provide for additional developed and dispersed recreation opportunities.

In response to this request, increased emphasis for developed recreation opportunities was incorporated into the Plan for management areas containing developed sites. Management emphasis was also increased to provide for more dispersed recreation opportunities throughout the Forest. Consequently, the Final Plan provides for improvement of developed site facilities and approximately three times more miles of trail construction and reconstruction than specified in the Draft Plan.

7. Grazing

Some 12 percent of those responding discussed the Forest's range management program. Some were critical about too much grazing and others felt that the Forest was too restrictive and advocated relaxed management practices. Specifically, the latter urged more permittee involvement for making management decisions.

The Forest Service manages National Forest System lands under the multiple use concept. Cooperation with livestock permittees in developing Allotment Management Plans is essential. Consultation with interested publics about management decisions for the National Forest is equally important.

C. Factors Used In Evaluating Selected Alternative

Alternative K was judged to maximize net public benefits and was selected as the preferred alternative because it:

- Ranks high when evaluated against decision criteria.
- Represents a practical and achievable mix of resource uses and amenity values.
- Provides for wilderness recommendation of higher quality roadless areas.
- Provides a high degree of environmental protection and noncommodity benefits, without severe impact on any resource.
- Supports economic stability of local businesses dependent upon Forest resources of grazing, minerals, and recreation.
- Can be supported by a broad cross section of the public.
- Is most responsive to the 9 issues.
- Provides for habitat improvement to accommodate increasing big game populations and maintain or improve habitat for threatened and endangered species (bald eagle, peregrine falcon, and Lahontan cutthroat trout) without severe restrictions on utilization of other Forest resources.
- Assures environmental quality through maintenance and enhancement of riparian areas, soil, water, and cultural resources.

After carefully evaluating public comments and again comparing effects of alternatives, the decision to adopt Alternative K, with some modification, was reaffirmed. Factors in this decision were: (1) It best satisfied decision criteria; (2) Public concerns about roadless areas recommended for wilderness were addressed through modification of previously designated boundaries and addition of two additional areas recommended for wilderness; and (3) Other public concerns about Alternative K were alleviated by changing and/or adding some management direction and some levels of outputs and activities. These changes were made without significantly altering the basic thrust of Alternative K, yet they tended to reduce concerns about specific aspects of the alternative.

D. Comparison of Proposed Action With Environmentally Preferable Alternative (EPA)

Alternative J is the environmentally preferable alternative because it recommends all 49 roadless areas for wilderness and has less potential to cause damage to physical and biological components of the environment. Alternatives D, F, E, and I have less impact on the physical and biological

environment than the selected alternative. Since the Humboldt National Forest does not have a commercial timber management program, with accompanying road construction activities, differences of environmental impacts among alternatives are not greatly significant.

A comparison of environmental impacts between the selected and other alternatives follows.

--Water Quality - Alternative J would maintain the highest output of water meeting quality standards. Alternative K maintains the fourth highest. Alternatives C, D, E, H, and I have lower outputs of water meeting quality standards.

--Soil Stability - Alternative J maintains the highest soil stability and productivity. Alternative K maintains the fourth highest. Impacts of other alternatives on this resource parallel the pattern for water quality.

--Livestock Grazing - Alternative D has the greatest environmental impact, resulting from deteriorating range conditions. Alternative J is next lowest in grazing AUM's, with no capital investments proposed that could disturb the land. Alternative K provides for improvement of poor condition ranges, with some capital investment projects proposed.

--Wildlife - Range and minerals activities would have the least impact on fish and wildlife indicator species under Alternative J, although minerals activities could adversely affect some indicator species. Also, beneficial or positive impacts to some indicator species could result from Alternative J. Effects upon wildlife indicator species as a result of mineral activities are not expected to change under Alternative K. Minerals and range activities could adversely affect some indicator species in the short-term, but long-term adverse effects are not expected.

--Cultural Resources - Alternative J would impact cultural resources least of all alternatives, as a result of lower levels of land-disturbing activities. The Preferred Alternative has potential for moderate increases in disturbance of cultural resources resulting from proposed increases in land-disturbing activities.

--Visual Quality - Visual quality would increase under Alternatives A, D, E, and J as a result of reduced land-disturbing activities. Alternative K has potential for moderate increases in short-term visual quality reduction.

--Air Quality - Air quality would not be expected to change from the current situation under any alternative. However, there would be only a slight short-term increase under Alternative J as a result of less land-disturbing activities.

E. Alternatives With Higher Present Net Value (PNV)

Present Net Value (PNV) is a means of measuring economic efficiency of alternatives. It is the difference between discounted benefits and discounted costs. Alternative K ranks seventh in PNV among alternatives. The following table displays a comparison of economic effects of the selected alternative (SA) or Alternative K, with EPA alternatives and those having a higher PNV.

F. Comparative Discussion of SA, EPAs and Higher PNVs

A summary of differences among alternatives is contained in Chapter II of the FEIS, and environmental consequences of implementing various alternatives are described in Chapter IV of the FEIS.

Alternative K, the selected alternative, provides greater overall long-term public benefits than the environmentally preferred alternative and those with a higher PNV. The selected alternative:

- Responds more positively to issues, concerns, and opportunities.
- Provides a desirable mix of priced and nonpriced benefits that yield maximum opportunities for recreation uses and increased grazing and wildlife habitat improvement.
- Improves all poor condition ranges to good or better condition.
- Provides for the most acres of soil and water improvement to enhance quality of environmental management.
- Affords levels of employment and income commensurate with the highest levels of other alternatives.
- Yields a steadily increasing amount of developed recreation visitor days and a greater annual average number than other alternatives.
- Sustains an overall increase in livestock grazing through time and the highest average annual number of AUMs.

TABLE I
COMPARISON OF SA WITH EPA AND HIGHER PNV ALTERNATIVES

Factors	Unit of Measure	ALTERNATIVES						
		K SA	J EPA 1 PNV 1	A EPA 2 PNV 4	C EPA 3 PNV 2	H EPA 4 PNV 5	D PNV3	I PNV6
PNV (4% Dis. Rate)	MM\$ (1982)	303.80	345.07	322.33	326.78	317.41	325.03	316.78
Employment*	#Jobs	398	409	415	416	398	387	395
Income*	MM\$\$ (1982)	10.80	10.92	11.09	11.14	10.75	10.47	10.76
Program Cost (4% Dis. Rate)	MM\$ (1982)	92.74	76.38	88.05	80.48	77.28	68.22	75.06
Return to U.S.** (Undiscounted)	MM\$ (1982)	1.07	0.64	0.66	0.93	1.02	1.04	1.12
Developed Recreation**	M RVDS	226.62	164.54	200.77	203.62	191.27	162.47	215.05
Dispersed Recreation**	M RVDS	432.46	471.33	463.58	453.16	429.33	424.73	411.45
Wilderness**	M Acres	333.00	1807.40	1233.68	713.79	483.41	330.28	64.67
Livestock Use**	M AUMs	306.65	297.56	298.85	288.29	298.34	293.33	305.64
Minerals**	M Acres Leased	381.30	91.74	99.83	269.97	349.06	372.31	403.83
Wildlife Use**	M WFUDs	150.86	151.24	150.83	151.14	149.90	148.41	149.46
Wildlife Hab. Imp.**		1/						
Structural Structures		29	2	3	4	3	1	4
Nonstructural Acres		363	155	154	137	102	77	108
Soil & Water Improvement**	Acres	16.86	15.28	13.71	10.43	9.14	5.00	7.28
Fuelwood Hvst**	Cords	5328	2297	2874	3917	4476	4508	5394

*For the year 1995
**Annual Average
/1 Completed by 1990

MM\$ Millions of dollars
M Thousands
AUMs Animal Unit Months
WFUDs Wildlife and Fish User Days

--Provides for more than twice the number of average annual nonstructural wildlife habitat improvement acres than any other alternative. It also allows for approximately twenty times as many structural wildlife habitat improvements through 1990 than any other alternative.

--Provides for more acres of mineral leasing than any of the more environmentally preferable alternatives and all but one alternative with a higher PNV.

Commercial timber harvesting is not an issue on the Humboldt National Forest.

IV. MITIGATION AND MONITORING

A. Mitigation

Appropriate mitigation measures are described in Chapter IV of the Plan.

Alternative K provides for all practicable means to avoid environmental damage.

Management constraints were imposed on this alternative to ensure long-term productivity of the land and compliance with threshold soil, water, and ambient air quality standards.

Each resource has a minimum management requirement level that acts as a base upon which alternative management programs were developed. Management practices below minimum management levels were not considered as options.

Stated as standards and guidelines, mitigating measures are intended to be adopted and enforced in all project level activities. These standards and guidelines are designed to ensure long-term productivity of the land while providing sustained yields of renewable resources. Examples of standards and guidelines described in Chapter IV of the Plan include maintaining viable populations of wildlife management indicator species, VQO's, cover/forage ratios, and State water quality standards.

Some of the more important mitigation measures incorporated into the Plan are:

--Resource activities on developed National Forest Recreation sites, recreation special use sites, and National Forest System trails will protect recreation values.

--Resource activities will mitigate visual impacts to meet established Visual Quality Objectives.

--Resource development activities impacting known cultural resource sites will provide for an archeological evaluation and appropriate protection or mitigation prior to project execution.

- No resource activities that degrade wilderness characteristics, or mechanical equipment use will be allowed in wilderness except in unusual or unavoidable circumstances as allowed under the Wilderness Act.
- Resource activities or development that change forage composition or impact livestock grazing will mitigate or avoid impacts. Noxious weed control, revegetation, or installation of water developments, fences or cattleguards may be appropriate mitigation measures.
- Protect ancient bristlecone pine, including remnants, from destruction or unauthorized removal through implementation of appropriate standards and guidelines.
- Maintain identified critical habitat for peregrine falcon, bald eagle, and Lahontan cutthroat trout (Endangered Species Act, 1973).
- Limit fish planting in wilderness to lakes with a history of transplants.
- Require that roads constructed for oil and gas development in areas managed for primitive or semiprimitive recreation be returned to original contour to mitigate effects on visual quality and recreation experience and restore undeveloped conditions.
- Mitigate effects of mineral leases on other resources -- most notably wildlife, soil and water, undeveloped characteristics and visual quality.
- Recommend that certain areas be withdrawn from mineral entry to mitigate effects on wildlife and undeveloped characteristics.
- Provide for cultural resource inventory and evaluation prior to earth-disturbing projects.
- Close administrative sites and buildings that do not meet health and safety requirements and remove structures.

B. Monitoring

Monitoring and evaluation are designed to provide feedback to Planners, the Forest Supervisor, and District Rangers. These activities will provide information relative to Plan implementation and effects of management activities. Chapter V of the Plan provides a detailed description of how monitoring of Plan implementation will occur.

More specifically, the Plan will determine:

1. If management direction is being applied as specified in the Plan.

- a. If the Forest is achieving Plan objectives as predicted.
 - b. If, as practices are implemented, standards and guidelines are being applied as specified in the Plan.
2. If effects of implementation are as predicted.
 3. If the Forest's program and management are resolving issues and concerns.

Monitoring is not designed to supersede activities or plans that are a part of day-to-day Forest management. Such things as potable water quality monitoring are not specified here but will continue.

VI. IMPLEMENTATION

The Plan will be implemented 30 days after the Notice of Availability of the Plan, EIS, and Record of Decision appears in the Federal Register. Time needed to bring activities into compliance with the Plan will vary depending on types of projects.

The Forest Supervisor will assure that (1) annual program proposals and projects are consistent with the Plan; (2) program budget proposals and objectives are consistent with management direction specified in the Plan; and (3) implementation is in compliance with the Regional Guide and goals and objectives in 36 CFR 219.10(e), 36 CFR 219.11(d), and 36 CFR 219.27.

Implementation is guided by management requirements contained in Forest Goals and Objectives, Direction, Standards and Guides, and Management Area Prescriptions found in Chapter IV of the Plan. These management requirements were developed through an interdisciplinary effort and contain measures necessary to mitigate or eliminate any long-term adverse effects. Any unavoidable adverse environmental effects, such as disruptive effects of vegetation manipulation on recreation or livestock grazing, will be temporary and will involve only a small percentage of the Forest at any one time. As can best be determined, all practical mitigation measures have been adopted and are included in Chapter IV of the Plan.


Proposals to use National Forest System (NFS) lands will be reviewed for consistency with the Plan. Management Direction contained in Chapter IV of the Plan will be used to analyze any proposal. Permits, contracts, and other instruments for occupancy and use of the NFS lands will be consistent with Management Direction in Chapter IV. This is required by 16 USC 1604(i) and 36 CFR 219.10(e).

VII. APPEAL RIGHTS

This decision is subject to appeal pursuant to 36 CFR 211.18.
Notice of appeal must be in writing and submitted to:

J. S. Tixier, Regional Forester
Intermountain Region
USDA, Forest Service
Federal Building
324 25th Street
Ogden, Utah 84401

Appeal notice must be submitted within 45 days from the date of this decision. A statement of reasons to support the appeal and any request for oral presentation must be filed within the prescribed 45-day period.



J. S. TIXIER
Regional Forester

AUG 19 1986

Date